Gary Lackie

Anchorage Area Sheep

by David Harkness

The mountainous habitat immediately east of Anchorage supports the world's largest wild sheep population living adjacent to a modern city. Dall sheep in this area (known as Game Management Subunit 14C) are so abundant that their numbers nearly equal those of sheep populations in the remainder of the Chugach Mountains, which comprise 7/8 of the entire range and extend more than 275 miles from the Knik River near Palmer to the Yukon border.

Little was known about Anchorage-area sheep before the late 1940s. Reports from early-day hunters indicate sheep were relatively abundant during the 1920s but were generally scarce during the 10 years prior to World War II. In 1949, U.S. Fish and Wildlife Service pilot Robert F. Scott reported counting 54 sheep between Eagle River and the Eklutna River. In 1956, he observed 314 in the same area. Some of this increase may have been related to improvement in aircraft and survey techniques at that time. Additional surveys flown during the late 1950s and early 1960s found approximately 1,000 sheep from Bird Creek to the Knik River. Similar numbers were observed by Alaska Department of Fish and Game (ADF&G) biologists during the late 1960s and early 1970s.

During the early 1960s the human population of Anchorage began to increase steadily, and with it local interest in sheep hunting. Harvest records were not kept until 1967. These data show that during 40-day seasons in the late 1960s hunters took 30-40 3/4-curl or greater rams annually.

As Alaska developed, interest in maintaining public land adjacent to Anchorage for recreational uses resulted in the creation of Chugach State Park in 1971. This state park encompasses nearly all sheep habitat in the immediate Anchorage area. ADF&G and the Alaska Division of Parks agreed to provide for a broad array of recreational uses of the sheep in the new park. Hunting was curtailed in several areas to provide special sheep viewing opportunities, and opening of the sheep hunting season was delayed until the day after Labor Day. This shortened the sheep hunting season to approximately two weeks and the harvest dropped to 25 rams per season. During this abbreviated season crowding of hunters increased greatly.

In 1976, ADF&G adopted a sheep hunting management plan for 14C with the primary goal of providing an opportunity to take large sheep. Providing the opportunities to view and photograph sheep were secondary goals in the areas and are the only uses in areas closed to hunting.

With the advent of a new management plan and increased interest in harvesting trophy sheep, regular aerial surveys became a major component of the management program. Surveys were begun in 1976 and have been flown annually during July or early August ever since. These surveys indicate the population remained at about 1,000 sheep from 1976-1979, and then began an increasing trend peaking in 1989 with a count of 2,412 (See Table 1, page 24). The reasons for the increase are not completely known, although a series of mild winters beginning in 1979-80 was probably the major factor. Following the severe winter of 1989-90, the count declined 11 percent to 2,141.

In addition to weather-related factors, it is important to emphasize that at least 90 percent of this large sheep population resides within the 495,000 acre Chugach State Park, where wildlife habitat receives near complete protection. In this case, regulated hunting is clearly compatible with the health of wildlife

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populations and the multiple use policy legislated within Alaska's state parks.

Current Hunting Regulations

Increasing hunting pressure and potential overharvest of large rams necessitated controlling the number of hunters if the primary management goal—of providing opportunity to take large sheep—was to be met. This was achieved through a system of drawing permit hunts implemented in 1982. Once hunter numbers were controlled, and the number of sheep continued to increase, cooperation between Chugach Park and ADF&G allowed for a gradual lengthening of the season. General hunting (240 permits) now begins on August 10, and an additional 105 archery-only permits, first issued in 1987, extend the season to October 10. These archery permits allow hunting in an area which was previously closed and extend the total hunting season to 62 days.

Of 345 total permittees, an average of 250 actually hunt sheep, of which 70-80 are bowhunters. Each hunter spends an average of 3.5 days afield. A time and space zoning system disperses hunters and allows for minimum crowding and conflicts with other users.

GMU 14C Sheep Survey and Harvest Data 1976-1990

Year	Legal Rams	Harvest
1976	86	25
1977*	34	29
1978	88	35
1979	85	44
1980	70	33
1981	82	31
1982	79	13
1983	118	17
1984	158	41
1985	138	26
1986	172	31
1987	162	39
1988	204	46
1989	214	52
1990	218	65

* Poor Counting Conditions

Sheep hunting in Chugach State Park can be extremely strenuous, with long hikes in rugged terrain. Successful hunters face the prospect of a 90-130 pound pack on the walk out. Nevertheless, many sheep hunters will attest that there are few outdoor experiences equal to pursuing Chugach State Park rams.

Current regulations allow the harvest of one sheep per hunter. The Board of Game passed the unusual "any sheep" regulation in 1989 for a variety of reasons, which included an attempt to curb the rapid growth of the population. They thought a substantial harvest of ewes over several years might diminish the effects of a possible die-off during a severe winter. Unfortunately, the long-term effect of the "any sheep" regulation may never be known since the small 1989 eweharvest (15) pales when compared to the 400+ sheep which died during the severe winter of 1989-90. Also, instead of killing a large number of ewes, which may have stabilized the population over time, many hunters prefer to kill young rams (3/4 and 1/2 curls), and have taken 51 during the two past seasons. The harvest of young rams is not consistent with meeting ADF&G's management goal. Future adjustment of the "any sheep" regulation may be desirable.

In 1990, hunters took 99 sheep, slightly more than 4 percent of the estimated herd size. The large-ram harvest was comprised of 41 full curl rams and 24 with 7/8 curl. In addition, hunters took 18 young rams and 16 ewes. The mean horn length of rams aged 7 years or older taken in 1990 was 36.9 inches.

Horn Characteristics and Subpopulations

Repeated aerial surveys, observations during the rut, and a requirement that successful hunters bring the horns of their sheep to ADF&G for aging, measuring, and kill location have provided a wealth of information on local sheep. This information allows the separation of 14C sheep into several subpopulations or breeding stocks.

Chugach Mountain rams have horn growth characteristics which are similar throughout the range. Most rams have fairly massive horns, with deep curls which rarely flare even in old age. However, local variations occur. For example, horns from rams living south of Eagle River tend to be smaller in overall circumference, with less "depth-of-curl" than horns from rams living north of Eagle River. Rams from areas in the park having dense populations have somewhat smaller horns than rams in less dense populations—a fact established by an earlier ADF&G study of ram horn growth throughout Alaska.

Closed Areas

About one-fourth of all Chugach State Park sheep range in 14C is closed to hunting. However, except for the Indian-Falls Creek population and a portion of the population north of Eagle River, many sheep move between unhunted and hunted areas. Many sheep move into closed areas for extended periods during the hunting season, providing sheep for both hunters and viewers over time.

Outlook

Overall, the Chugach State Park sheep management story is a happy one. Because of land status, the habitat for these sheep will continue to exist in an unaltered condition even though it is adjacent to a growing city of 250,000 people. Cooperative management between ADF&G, which is responsible for managing the sheep, and the State Division of Parks, which manages the habitat, has produced a wide range of human use opportunities, ranging from nonconsumptive use through trophy ram hunting. There is no doubt that further management challenges will arise. Still, hunting, photographic, and viewing opportunities are at levels unknown since the founding of Anchorage. It seems unlikely that sheep numbers can continue to increase indefinitely, but habitat loss and over-hunting are unlikely to play significant roles in future fluctuations in sheep abundance. With careful management and a little luck with weather conditions, these sheep will benefit a variety of users for years to come.

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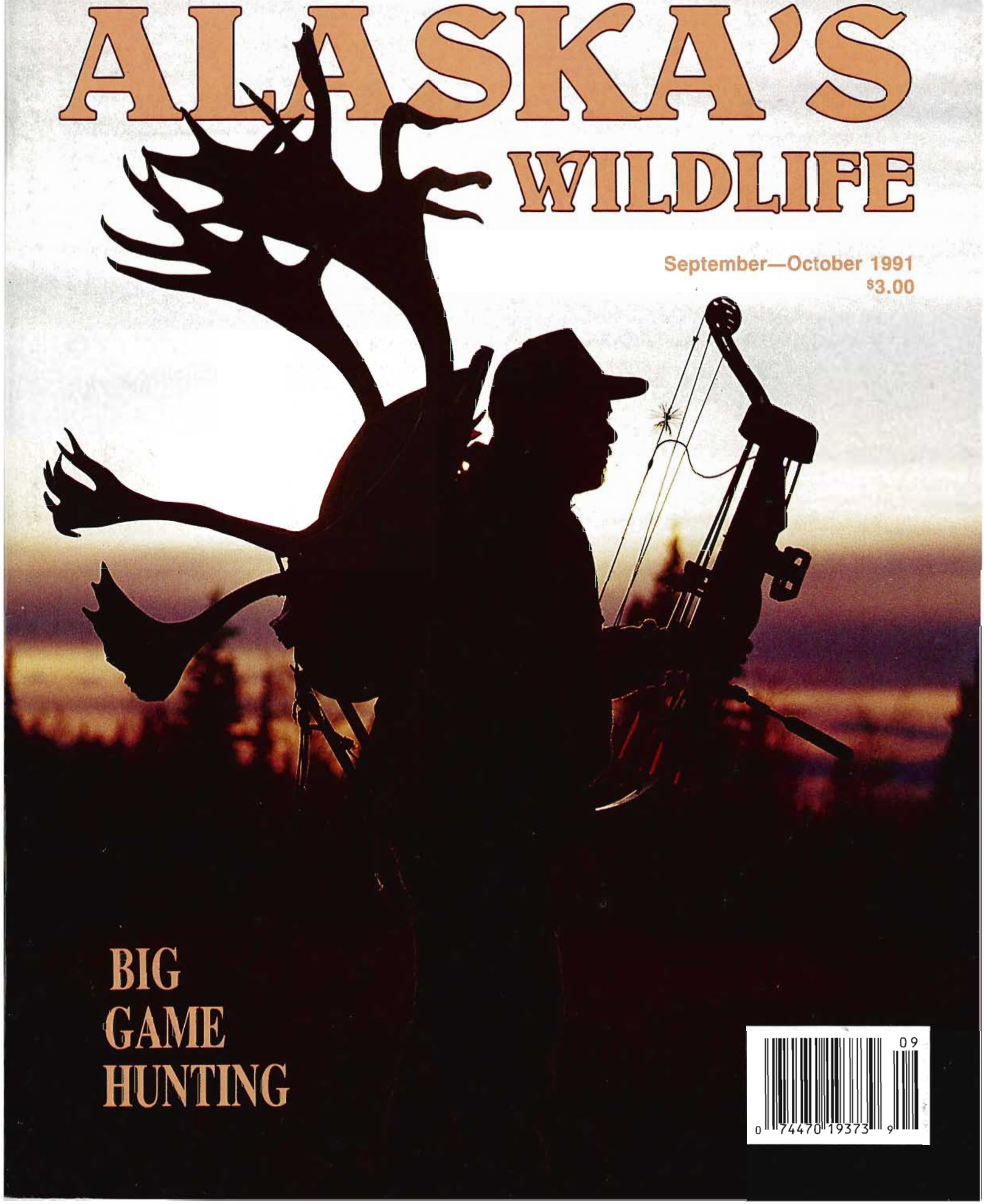

BIG GAME HUNTING

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